management and it remains to be seen whether the STICH trial results trigger a paradigm shift in clinical practice.

Supplementary material

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References

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Recurrent syncope in the young: do not forget the coronary arteries

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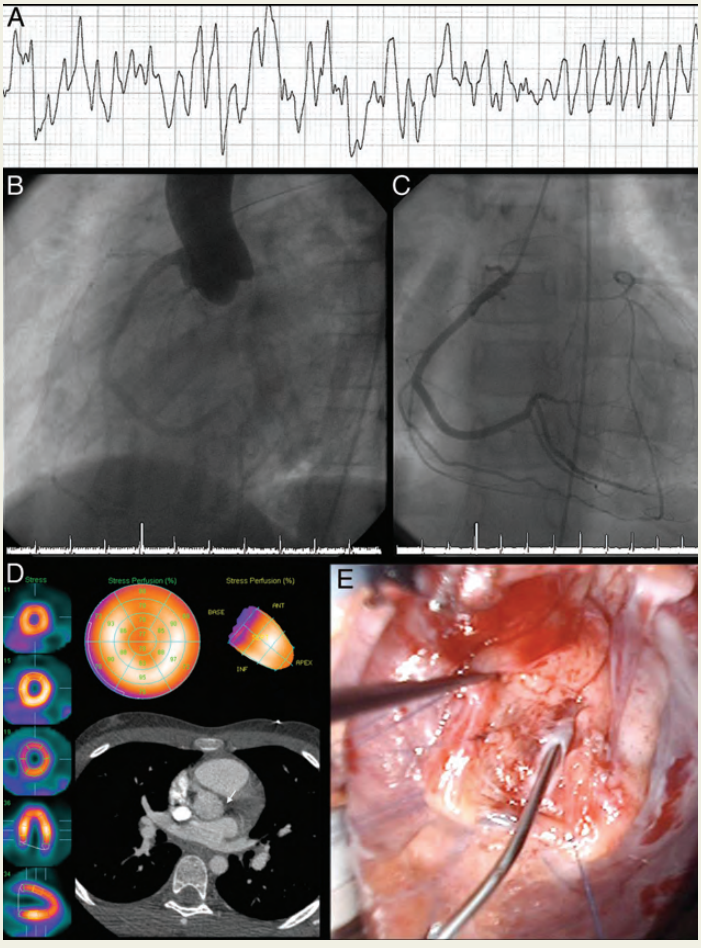

A 9-year-old patient was resuscitated after sudden cardiac arrest (SCD) during a soccer game. The boy had a history of exercise-related syncope since the age of 5, but all the previous extensive cardiac evaluations were unremarkable.

During resuscitation, ECG documented ventricular fibrillation (*Panel A*); defibrillation was successful. At hospital admission, clinical and non-invasive cardiac findings were unremarkable. Cardiac catetherization was performed primarily for invasive electrophysiological study. Coronary angiography showed a prominent right coronary artery (*Panel B*) and the left coronary ostium was missed; all the left coronary system was exclusively perfused retrogradely (*Panel C*). Diagnosis of atresia of the left coronary artery (LCA) was done. Further non-invasive perfusion imaging was performed. SPECT with adenosine stress testing demonstrated intact myocardial perfusion (*Panel D*); CT confirmed lack of continuity between the LCA and the aortic root (*Panel D*). MRI ruled out presence of scars. LCA atresia was confirmed intraoperatively, as ostium cannulation was not possible either from the aortic root or from the LCA (*Panel E*). Surgical revascularization consisted of LIMA/LAD bypass. 3 months later, the patient was well and asymptomatic, and the aorto-coronary bypass patent.

Even though generally a rare condition, congenital anomalies of the coronary arteries are a common cause of SCD in young individuals. Among all anomalies, atresia of one coronary artery is exceedingly rare, having been reported in few isolated cases. In patients with a typical history of exercise-related ischaemic symptoms, the level of suspicion should be high and invasive evaluation initiated. Timely diagnosis is crucial for preventing SCD and planning surgical revascularization.